

Section I. (Amendments to the Claims)

Please add new claims 12-16, as set out below in the listing of claims 1-16 of the application.

1. (Original) Adult stem cells which are obtained by culturing umbilical cord-derived blood in a medium containing 5-20% of human serum or plasma and show the characteristics of:

(a) showing positive immunological responses to all of CD24, CD29, CD31, CD33, CD45 and CD49B, and negative immunological responses to CD34, CD51/61, CD62L, CD62P, CD73, CD90, CD133 and CD135;

(b) growing adhered to plastics and showing round-shaped or spindle-shaped morphological features; and

(c) having ability to differentiate into mesodermal, endodermal and ectodermal cells.

2. (Original) The adult stem cells according to claim 1, wherein additionally show positive immunological responses to SH-2 and/or SH-3.

3. (Previously presented) The adult stem cells according to claim 1, showing positive or negative immunological responses to CD44, CD105 and CD117.

4. (Original) The adult stem cells according to claim 1, wherein the mesodermal cells are osteogenic cells, nerve cells or endothelial cells.

5. (Original) A method for producing adult stem cells showing the following characteristics:

(a) showing positive immunological responses to all of CD24, CD29, CD31, CD33, CD45 and CD49B, and negative immunological responses to CD34, CD51/61, CD62L, CD62P, CD73, CD90, CD133 and CD135;

(b) growing adhered to plastics and showing round-shaped or spindle-shaped morphological features; and

(c) having ability to differentiate into mesodermal, endodermal and ectodermal cells, the method comprising the steps of: culturing umbilical cord-derived blood in a medium containing 5-20% of human serum or plasma; and recovering the adult stem cells.

6. (Original) The method for producing adult stem cells according to claim 5, wherein the human serum or plasma is autologous or allogous.

7. (Previously presented) A cellular therapeutic agent for ischemic necrotic disease caused by occlusive arterial disease, which contains the adult stem cells according to claim 1, as active ingredients.

8. (Previously presented) The cellular therapeutic agent for ischemic necrotic disease caused by occlusive arterial disease according to claim 7, wherein the ischemic necrotic disease is myocardial infarction, cerebral infarction, Buerger's disease, or gangrene of extremities resulting from diabetic complications.

9. (Previously presented) A cellular therapeutic agent for ischemic necrotic disease caused by occlusive arterial disease, which contains the adult stem cells according to claim 2, as active ingredients.

10. (Previously presented) A cellular therapeutic agent for ischemic necrotic disease caused by occlusive arterial disease, which contains the adult stem cells according to claim 3, as active ingredients.

11. (Previously presented) A cellular therapeutic agent for ischemic necrotic disease caused by occlusive arterial disease, which contains the adult stem cells according to claim 4, as active ingredients.

12. (New) A method of treatment of cardiovascular disease in an individual experiencing same, said method comprising administration to said individual of a therapeutic amount of adult stem cells as claimed in claim 1.

13. (New) The method of claim 12, wherein said cardiovascular disease comprises occlusive arterial disease.

14. (New) The method of claim 12, wherein said cardiovascular disease comprises myocardial disease.

15. (New) A method of treatment of necrosis involving a limb of an individual experiencing same, said method comprising administration to said individual of a therapeutic amount of adult stem cells as claimed in claim 1.

16. (New) A cellular therapeutic composition comprising the adult stem cells of claim 1 as active ingredients.